

Title (en)
OPTICAL FIBER

Title (de)
OPTISCHE FASER

Title (fr)
FIBRE OPTIQUE

Publication
EP 3869252 A4 20220105 (EN)

Application
EP 20883675 A 20201106

Priority
• JP 2019203556 A 20191108
• JP 2020041539 W 20201106

Abstract (en)
[origin: EP3869252A1] An optical fiber (10) includes a glass portion (13), a primary coating layer (14), and a secondary coating layer (15). In the optical fiber (10), a value of microbend loss characteristic factor $F_{\mu BL_G\Delta\beta}$ represented by $F_{\mu BL_G\Delta\beta} = F_{\mu BL_G} \times F_{\mu BL_G\Delta\beta}$ by using geometry microbend loss characteristic $F_{\mu BL_G}$ and optical microbend loss characteristic $F_{\mu BL_G\Delta\beta}$ is 6.1 $[(GPa)^{-1} \cdot \mu m^{-2.5} / rad^8] \cdot 10^{-12}$ or less.

IPC 8 full level
G02B 6/02 (2006.01); **G02B 6/44** (2006.01)

CPC (source: CN EP US)
C03C 25/106 (2013.01 - CN); **G02B 6/02395** (2013.01 - CN EP US); **G02B 6/44** (2013.01 - CN); **G02B 6/4409** (2013.01 - EP); **G02B 6/4433** (2013.01 - EP)

Citation (search report)
• [X] US 2011229101 A1 20110922 - DE MONTMORILLON LOUIS-ANNE [FR], et al
• [A] US 8301001 B2 20121030 - NAKANISHI TETSUYA [JP], et al
• [A] SILLARD P ET AL: "Micro-bend losses of trench-assisted single-mode fibers", 36TH EUROPEAN CONFERENCE AND EXHIBITION ON OPTICAL COMMUNICATION : (ECOC 2010) ; TORINO, ITALY, 19 - 23 SEPTEMBER 2010, IEEE, PISCATAWAY, NJ, USA, 19 September 2010 (2010-09-19), pages 1 - 3, XP031790011, ISBN: 978-1-4244-8536-9
• [A] ROBERT OLSHANSKY: "Mode Coupling Effects in Graded-Index Optical Fibers", APPLIED OPTICS, vol. 14, no. 4, 1 April 1975 (1975-04-01) - 1 April 1975 (1975-04-01), US, pages 935 - 945, XP055653060, ISSN: 0003-6935, DOI: 10.1364/AO.14.000935
• See references of WO 2021090913A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3869252 A1 20210825; EP 3869252 A4 20220105; CN 113099725 A 20210709; CN 113099725 B 20230804; JP 2022101633 A 20220706; JP 7403574 B2 20231222; JP WO2021090913 A1 20211125; US 11860406 B2 20240102; US 2022026632 A1 20220127; WO 2021090913 A1 20210514

DOCDB simple family (application)
EP 20883675 A 20201106; CN 202080006055 A 20201106; JP 2020041539 W 20201106; JP 2021513356 A 20201106; JP 2022069510 A 20220420; US 202017297716 A 20201106